

UNIFORM HAZARDOUS WASTE MANIFEST		1. Generator's US EPA ID No. W.A.D.9.8.0.7.3.8.5.4.6.0.1.0.0.2		Manifest Document No.		2. Page 1 of 1		Information in the shaded areas is not required by Federal law.	
		3. Generator's Name and Mailing Address Alaskan Copper Works P.O. Box 3548, Seattle, WA 98124		6. US EPA ID Number 1.C.A.D.0.5.9.2.4.0.7.1.3		A. State Manifest Document Number			
4. Generator's Phone (206) 382-8379		5. Transporter 1 Company Name M.C. NOTTINGHAM OF SO. CAL		8. US EPA ID Number		D. Transporter's Phone (909) 423-3264		B. State Generator's ID	
7. Transporter 2 Company Name		9. Designated Facility Name and Site Address World Resources Company 8113 West Sherman Street Phoenix, Arizona 85043		10. US EPA ID Number A.Z.D.9.8.0.7.3.5.5.0.0		E. State Transporter's ID		C. State Transporter's ID	
						F. Transporter's Phone		G. State Facility's ID	
						H. Facility's Phone 800-972-1956			
11. US DOT Description (Including Proper Shipping Name, Hazard Class and ID Number)		12. Containers		13. Total Quantity		14. Unit Wt/Vol		Waste No.	
a. RM RQ, Hazardous waste, solid, n.o.s., (F008), 9, NA3077, III		No. Type 023 CF		03.723		P		F008	
b. RQ, Hazardous waste, solid, n.o.s., (D007), 9, NA3077, III		011 DM				P		D007	
c.									
d.									
J. Additional Descriptions for Materials Listed Above		K. Handling Codes for Wastes Listed Above							
15. Special Handling Instructions and Additional Information 24 Hour Emergency Response: 1-800-424-9300 CHEMTREC (Emergency call pager #206-648-8423) (Use CHEMTREC company code "WORR") Wear gloves & goggles PO # M65769									
16. GENERATOR'S CERTIFICATION: I hereby declare that the contents of this consignment are fully and accurately described above by proper shipping name and are classified, packed, marked, and labeled, and are in all respects in proper condition for transport by highway according to applicable international and national government regulations. If I am a large quantity generator, I certify that I have a program in place to reduce the volume and toxicity of waste generated to the degree I have determined to be economically practicable and that I have selected the practicable method of treatment, storage, or disposal currently available to me which minimizes the present and future threat to human health and the environment; OR, if I am a small quantity generator, I have made a good faith effort to minimize my waste generation and select the best waste management method that is available to me and that I can afford.									
Printed/Typed Name GERARD A. THOMPSON		Signature <i>[Signature]</i>		Month Day Year 09/12/01					
17. Transporter 1 Acknowledgement of Receipt of Materials		Printed/Typed Name JAY ROY RELPH		Signature <i>[Signature]</i>		Month Day Year 09/10/01			
18. Transporter 2 Acknowledgement of Receipt of Materials		Printed/Typed Name		Signature		Month Day Year			
19. Discrepancy Indication Space									
20. Facility Owner or Operator: Certification of receipt of hazardous materials covered by this manifest except as noted in Item 19.									
Printed/Typed Name		Signature		Month Day Year					

GENERATOR COPYPRINTED ON RECYCLED PAPER
USING SOYBEAN INKPRINTED WITH
SOY INK

Material Safety Data Sheet

F006 Recyclable Material (Filter Cake)

Recycler's Facility Name and Site Address:

World Resources Company

8113 West Sherman Street

Phoenix, Arizona 85043-3000

Tel: 602-233-9166 Fax: 623-936-9164

Issued: 8/7/90

Revised: 8/5/99 DLS

Call CHEMTREC only in the event of
emergencies during shipping that
involve a spill, leak, fire, or accident
(all calls are recorded)

For Emergencies During Shipping in
the US or Canada, Day or Night,

Call: CHEMTREC 800-424-9300
(Use CHEMTREC Company Code "WORR")

For calls from other countries call:
703-527-3887 Collect

Section 1

Material Identification

EPA Waste Classification : F006

Generic Name : Electroplating/Metal-Finishing Wastewater Treatment
Sludge

Chemical Family : Metallic(Hydroxide)Precipitates

Synonym : Non-ferrous Metal Hydroxide Filter Cake

DOT Shipping Name : RQ Hazardous waste solid, n.o.s. (F006)

DOT Hazard Class : 9 ; Packing Group : III

DOT Identification Number : NA 3077

Guide 171 of the North American Emergency Response Guidebook

Applies

Section 2

Hazardous Ingredients

Ingredient:	CAS Number:	Content %:	ACGIH-TLV	Toxicology: (rat, oral)
Copper Hydroxide	20427-59-2	0 - 30	1.0 mg/m ³ (Dust)	LD-50 1,000 mg/kg
Nickel Hydroxide	12054-48-7	0 - 15	1.0 mg/m ³ (Dust)	LD-50 1,500 mg/kg
Calcium Hydroxide	1305-62-0	0 - 15	5.0 mg/m ³ (Dust)	LD-50 7,340 mg/kg
Amorphous Silica	61790-53-2	0 - 10	10.0 mg/m ³ (Dust)	LD-50 Not Determined

Section 3

Physical And Reactivity Data

Description: Solid, Clay-like, Gray/Green to Brown,
Water Content 30 - 80%

Specific Gravity: 2.5 To 3.5

Solubility: Insoluble in Water

Incompatible Reactivity : None Known

Vapor Pressure : Insignificant

Stability : Avoid Contact With Acids

Polymerization : Will Not Occur

Density : 50 to 90 lbs/cu ft

Boiling Point: Above 2600°C

Melting Point: Above 1800°C

pH: 7.0 to 10.0

Odor: Nil

Section 4

Fire And Explosion Data

Flashpoint: Nonflammable

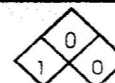
Special Firefighting Procedures: None

Product Decomposition (Due To Fire Or Explosion): None

Oxidation: Non-oxidizing

Explosive: Non-Explosive

NFPA
Fire Diamond



Section 5

Toxicity

Listed Carcinogen component: Nickel

Toxicology: See Sec. 2

Route of Entry: Inhalation and Ingestion

Section 6

Health Effects And First Aid

Inhalation: Dust may irritate mucous membranes and upper respiratory tract. Remove to fresh air and treat symptoms.

Ingestion: Rare in industry. Induce vomiting (do not induce vomiting or give a liquid to an unconscious person) and call a physician.

Eyes: Dust may irritate eyes. Wash with copious amounts of water for 15 minutes. If effects persist, call a physician.

Skin: Dust may irritate skin, causing forms of eczema. Wash with soap and water.

Long-Term: The effects of long-term chronic overexposure may affect the following target organs or body systems--blood,
digestive, respiratory, lungs, liver, kidneys and skin.

Comments: Special attention should be given to employees with anemia, restricted respiratory abilities, lung cancer, permanent
kidney damage and metal-sensitive skin or skin lesions.

Section 7

Precautions For Safe Handling

Handling: Good personal and industrial hygiene should always be practiced. It is recommended that personal protective equipment (PPE) be used by
personnel who will come in contact with the material. The PPE should include eye protection, respirator and gloves.

Storage: Keep covered and avoid conditions where wind could cause dispersal. Do not eat, drink or smoke where material is handled to avoid inha-
lation or ingestion. Store in a dry area under cover to protect from rain.

Spills: Use cleaning procedures that avoid creating excessive dust. Vacuum when possible. Package material and ship to World Resources Com-
pany at above address.

Section 8

Control Measures

Respiratory Protection : NIOSH-MSHA approved respirators as required.

Eye Protection : Safety Glasses recommended.

Other Protective Equipment : Coveralls are recommended, but not required.

Hand Protection : Gloves recommended.

Section 9

Generator's Verification

This MSDS is provided solely for informational purposes and no warranty or responsibility is extended even though reasonable precautions have been
taken in the preparation of the data contained for this recyclable material. To the best of my knowledge, this MSDS describes the recyclable material

listed on the attached Manifest Number: 04002 Telephone: 206-382-8379 Date: 4-10-01

Company Name and Address: Alaskan Copper Works

P.O. Box 3546, Seattle, WA 98124

Signature:

Recycled Paper

**WORLD RESOURCES COMPANY**

P H O E N I X , A R I Z O N A

Recycling for a healthier environment

**LAND DISPOSAL
RESTRICTION NOTICE****F006**

EFFECTIVE 11/09/98

[A copy of this Notice must be retained by the Generator for at least three (3) years, pursuant to U.S. EPA Regulation 40 CFR §268.7(a)(8). Moreover, the Generator should check the hazardous-waste regulations of his/her own State, inasmuch as, if there is a State analogue to the federal regulation, it may require a longer retention time, such as five (5) years. It should also be noted that the federal regulation--and, typically, State analogues as well--requires the retention period to be extended further in specified cases.]

To: **WORLD RESOURCES COMPANY**
From: **COMPANY NAME:**
Alaskan Copper Works

8113 West Sherman Street, Phoenix AZ 85043-3000**COMPANY ADDRESS:****P.O. Box 3546, Seattle, WA 98124****MANIFEST
NUMBER:****01002****DATE OF
SHIPMENT:****4-10-01**

This shipment of material is subject to the land disposal restrictions of 40 CFR Part 268. The applicable land disposal restriction information, provided in accordance with 40 CFR §268.7(a)(2), is as shown in this table:

EPA Material Number	Treatability Group	CFR Reference for Treatment Standards
F006	non-wastewater	40 CFR §268.40

SIGNATURE:**TITLE:****Environmental Spec.****NAME PRINTED:****Gerald A. Thompson****DATE:****Instructions for Completion of this Land Disposal Restriction Notice [LDRN]**

This LDRN has been prepared based on a listed material--F006--as the primary designation of the material. This designation is based on information furnished by the Generator of the material. While it is believed to be accurate, it is the Generator's responsibility to determine whether his/her material is restricted from land disposal, and to correctly complete the LDR Notice (as stated in 40 CFR §268.7(a)(2)).

An F006 designation on the LDRN includes the following constituents: cadmium (D006), chromium (D007), lead (D008), silver (D011), cyanide, and nickel. However, the designation does *not* include arsenic (D004), barium (D005), mercury (D009), or selenium (D010). If your F006 material contains any of those four constituents not included in the F006 designation, then use the following instructions.

In determining the need for any additional entries on the LDRN for the F006 material, the levels of arsenic, barium, mercury and selenium must be examined to determine if the levels equal or exceed the threshold concentrations of constituents for the Toxicity Characteristic limit as identified in 40 CFR §261.24 (Table 1), as shown in the left-hand column of the table below (as stated in 40 CFR §268.9).

If (after testing or based upon the generator's knowledge of the material) each metal level does not equal the Toxicity Characteristic level shown below, then *no additional entry* is required on the LDR Notice. If the level is known to be or determined to be equal to or above the limit shown below for any of these metals, then the appropriate information corresponding to that individual metal (in the right-hand column below) *must be added* to the LDR Notice.

REFERENCE INFORMATION TOXICITY CHARACTERISTIC		APPROPRIATE ENTRY ON LDR NOTICE		
Metal	Concentration Level	EPA Material Number	Treatability Group	CFR Reference for Treatment Standards
ARSENIC	5.0 mg/l	D004	non-wastewater	40 CFR §268.40
BARIUM	100 mg/l	D005	non-wastewater	40 CFR §268.40
MERCURY	.02 mg/l	D009	non-wastewater	40 CFR §268.40
SELENIUM	1.0 mg/l	D010	non-wastewater	40 CFR §268.40

F006 GENERATORS

MATERIAL IDENTIFICATION

DOT BASIC SHIPPING DESCRIPTION AND TECHNICAL NAME
Hazardous waste, solid, n.o.s., (F006), 9, NA3077, III

NORTH AMERICAN
EMERGENCY
RESPONSE

TAKEN FROM GUIDE 171 OF THE NORTH AMERICAN EMERGENCY RESPONSE GUIDEBOOK

(Underlined text applies directly to the material listed above)

POTENTIAL HAZARDS

FIRE OR EXPLOSION

1. Some may burn but none ignite readily.
2. Some may polymerize (P) explosively when heated or involved in a fire.
3. Containers may explode when heated
4. Some may be transported hot

HEALTH

1. Inhalation of material may be harmful.
2. Contact may cause burns to skin and eyes.
3. Inhalation of Asbestos dust may have a damaging effect on the lungs.
4. Fire may produce irritating, corrosive and/or toxic gases.
5. Runoff from fire control may cause pollution.

PUBLIC SAFETY

1. CALL CHEMTREC at 1-800-424-9300 FOR EMERGENCY ASSISTANCE (Use CHEMTREC Company Code "W0RR").
2. Isolate spill or leak area immediately for at least 10 to 25 meters (30-80 feet) in all directions.
3. Keep unauthorized personnel away.
4. Stay upwind.

PROTECTIVE CLOTHING

1. Wear positive pressure self-contained breathing apparatus (SCBA).
2. Structural firefighters' protective clothing will only provide limited protection.

EVACUATION

Fire

1. If tank, rail car or tank truck is involved in a fire, ISOLATE for 800 meters (1/2 mile) in all directions; also, consider initial evacuation for 800 meters (1/2 mile) in all directions.

FIRE

EMERGENCY RESPONSE

Small Fires

1. Dry chemical, CO₂, water spray or regular foam.

Large Fires:

1. Water spray, fog or regular foam.
2. Move containers from fire area if you can do it without risk.
3. Do not scatter spilled material with high pressure water streams.
4. Dike fire control water for later disposal.

Fire Involving Tanks:

1. Cool containers with flooding quantities of water until well after fire is out.
2. Withdraw immediately in case of rising sound from venting safety devices or discoloration of tank.
3. ALWAYS stay away from the ends of tanks

SPILL OR LEAK

1. Do not touch or walk through spilled material.
2. Stop leak if you can do it without risk.
3. Prevent dust cloud.
4. Avoid inhalation of asbestos dust.

Small Dry Spills

1. With clean shovel, place material into clean, dry container and cover loosely; move containers from spill area.

Small Spills

1. Take up with sand or other noncombustible absorbent material and place into containers for later disposal.

Large Spills

1. Dike far ahead of liquid spill for later disposal.
2. Cover powder spill with plastic sheet or tarp to minimize spreading.
3. Prevent entry into waterways, sewers, basements or confined areas.

FIRST AID

1. Move victim to fresh air.
2. Call emergency medical care.
3. Apply artificial respiration if victim is not breathing.
4. Administer oxygen if breathing is difficult.
5. Remove and isolate contaminated clothing and shoes.
6. In case of contact with substance, immediately flush skin or eyes with running water for at least 20 minutes.
7. Ensure that medical personnel are aware of the material(s) involved, and take precautions to protect themselves.

[illegible]

DATE _____

4-9-01

APPROVED BY

DATE

4/9/01

☒ HERE FOR RETURN OF YELLOW COPY

TO BE FILLED IN BY PURCHASING DEPT.

PURPOSE OR USE

P.O. NUMBER

M-65769

DELIVERY NEEDED BY

VENDOR

SHIP TO ADDRESS

CONTACT

TELEPHONE
NO.

**SUGGESTED
VENDOR**

DELIVERY
PROMISED

SHIP VIA

423004 Rev. 7/96

World Resources Co.